

Colegiul Național *Andrei Șaguna* Brașov



International Baccalaureate Diploma Programme

CURRICULUM GUIDE

PER ASPERA AD ASTRA

Colegiul Național *Andrei Șaguna* from Brașov is a Candidate School* for the Diploma Programme. This school is pursuing authorization as an IB World School. These are schools that share a common philosophy—a commitment to high quality, challenging, international education that Colegiul Național *Andrei Șaguna* believes is important for our students.

**Only schools authorized by the IB Organization can offer any of its four academic programmes: the Primary Years Programme (PYP), the Middle Years Programme (MYP), the Diploma Programme, or the Career-related Programme (CP). Candidate status gives no guarantee that authorization will be granted. For further information about the IB and its programmes, visit www.ibo.org.*



Welcome to the IB Diploma Programme

Carmen Felicia Tănăsescu

Head of School

Recognised on a national scale, Colegiul Național *Andrei Șaguna* (CNAS) in Brașov remains the fundamental space of intellectual, moral and attitudinal development for generations of students.



Our school has always centred on encouraging students on the road to scientific exploration. Our main educational targets focus on instilling the values of questioning and understanding the principles which guide our life, critical thinking, scepticism, and, most importantly, responsibly assuming a social role in the current society. This is how we preserve the tradition and history of our school as we look towards the future with hope and optimism.

Our students are extremely important and, as such, they should view school as a place of growth and inspiration. Our institution is recognised for the activities and discussions we propose, the atmosphere we create each year, and the effective teacher-student communication, another essential aspect alongside professionalism and scientific rigour.

Dear students, I look forward to working with you to achieve your goals and reach your full potential!

Diana Elena Banu

DP Coordinator

The Diploma Programme in our school is a dream come true for the Pedagogical Leadership Team (PLT), because it opens a door to extraordinary opportunities offered to our students and the entire school community (teachers, parents, partners, etc.). These regard the choice of a certain university or a particular career path, but, above all, the chance to learn and grow in an international educational system that aims to form the student as a human being, in all its complexity (intellectual, behavioral, emotional, attitudinal), as a global citizen.

This curriculum guide is meant to introduce you to the International Baccalaureate Diploma Programme (IBDP), the subjects we will offer at Colegiul Național *Andrei Șaguna* (CNAS) in Brașov and what sets IBDP apart from other educational systems. While choosing the best courses for you, from the ones available in the programme, you should not forget to consider:

- what you like most
- what challenges you and helps you evolve
- what you would like to study but do not have the opportunity
- what you are advised by teachers, parents and/or the DP coordinator.

As DP coordinator, I will always be there for you to answer any question you may have, to guide and support you in your academic and personal endeavours over the next two years.



Our Mission



Colegiul Național *Andrei Șaguna* from Brașov is a landmark in the life of its community members, students and graduates. Through our educational model we provide not only a top academic training, but also the development of the necessary skills in a society of the future based on tolerance, inclusion, critical and creative thinking, innovation, information exchange, collaboration, multilingualism, integrity and local and global awareness.

Our Vision

Our vision is to set a continuous tradition of academic excellence, integrity and opportunities for personal growth meant to form lifelong learners that take action and contribute to the world.



Why Choose IBDP

The International Baccalaureate Diploma Programme (IBDP) is an international programme developed by educators from around the world. It is the result of the analysis and inclusion of the best educational practices from different systems meant to form internationally-minded and well-rounded students. The DP has at its very centre the IB mission, which is to create a better and more peaceful world through education that builds intercultural understanding and respect.

The Diploma Programme (DP) is a two-year programme, whose completion earns the student an internationally recognized diploma that facilitates geographic and cultural mobility and worldwide university entrance qualifications. It is a unique, challenging and rewarding programme through which students develop both academic (thinking, research) and life (communication, social and self-management) skills, through the variety and the depth of the subjects and activities that prepare them for the world of the 21st century.

The DP students are prepared, after achieving the Diploma, to become lifelong learners, compassionate and active citizens of an increasingly global society. Thus, by the end of the programme, students will have developed skills that empower them:



- to think critically and challenge assumptions
- to use advanced research skills to solve complex problems
- to gain admission to the preferred university
- to adjust more easily to university studies
- to perform very well academically at any top university in the world
- to drive their own learning
- to be more culturally aware
- to be multilingual
- to take action to make the world a better place
- to be able to establish connections with people in a rapidly changing world
- to be compassionate, caring, in authentic service to others

Understanding the Diploma Programme

The International Baccalaureate Diploma Programme (IBDP) promotes language and literacy, multilingualism, the social sciences, sciences, mathematics, the arts, interdisciplinary learning, creativity, activity, service and international mindedness. Its purpose is to form students that are knowledgeable, inquiring, caring, risk-takers, good communicators, reflective, principled, balanced and open-minded.



The IBDP curriculum consists of six subject groups and the three elements of the DP 'core', i.e. Theory of Knowledge (TOK), Extended Essay (EE) and Creativity, Activity, Service (CAS) – which sit at the centre of the DP programme model. Over the two-year programme, the students study six subjects chosen from the six subject groups: Studies in Language and Literature (Group 1), Language Acquisition (Group 2), Individuals and Societies (Group 3), Sciences (Group 4), Mathematics (Group 5) and the Arts (Group 6). Subjects can be studied at standard level (SL) (150 hours/60 min/two years) or at higher level (HL) (240 hours/60 min/two years). Some subjects, such as Environmental Systems and Societies, can be offered only at standard level.

When enrolling for the Diploma Programme

- students should choose 3 Higher Level (HL) subjects and 3 Standard Level (SL) subjects
- one and the same subject cannot be taken at both Standard Level and Higher Level
- students should choose one subject from each group. There is an exception: the Arts group choice can be replaced by choosing another subject from any other group
- at least two languages are studied and the same language cannot be taken in both Group 1 and Group 2

Choosing the DP subjects

The right combination of subjects at DP will maximise students' strengths and set the goals for their future study choices. Therefore, the selection of the most appropriate IBDP subjects is paramount. The respective subjects will be studied in depth, which will require dedicated effort and time over the two-year programme.

The students will select their courses with the active support of their parents, teachers, the University and Careers Counsellor and the DP coordinator. Students will be guided to explore and understand what each subject offers and the various topics that they have to study under the subject. The average marks in the subjects studied in grades 9 and 10 at high school level in the Romanian state educational systems are valuable indicators of the students' level and should be taken into consideration when opting for a specific course.

Also, students' intentions concerning future university choices, both in terms of location and academic requirements, play an important role. With the help of teachers, the DP coordinator and the University and Careers Counsellor, students will review the university requirements needed in terms of subjects or combination of subjects and levels. Based on the career option that the students want to pursue, they must choose between HL and SL.

Apart from the current skills and abilities and the future aspirations, an innate and authentic interest in a particular subject is another important criterion to consider when choosing to study a DP subject.

Assessment

The two-year Diploma Programme includes both internal (IA) and external assessment (EA) to assess student performance.

Internal or school-based *assessment* is conducted by the teachers of the school primarily in the second year of the diploma course and it counts as part (about 20%) of a student's final Diploma Programme grade in a subject. All subject teachers are trained by the IB to administer and mark tasks based on clear grade descriptors. These tasks include essays, mathematical portfolios, oral language exams, fieldwork assignments, and practical and investigative work in the sciences. Internal assessment is moderated by external assessors that validate or change the marks given.

In order to ensure objectivity and reliability, written examinations at the end of the DP form the *external assessment* for most courses. These take place at the end of the DP course, in May of the second year, and comprise about 80% of each student's final Diploma Programme grade. The exams take a number of forms, including oral and written examinations, long and short responses, data-based questions, essays and multiple choice questions. Externally assessed coursework completed by students over an extended period under teacher supervision is specific to programme areas, such as theory of knowledge (TOK) essays and the extended essay (EE).

HL and SL courses differ in scope but are assessed against the same grade descriptors, both internally and externally, with HL candidates expected to demonstrate the various elements of the grade descriptors across a greater body of knowledge, understanding and skills.

During the programme, students receive regular feedback on formative and summative tasks and sit mock exams in order to measure overall learning of students towards the end of the course of study, record progress and identify areas that need improvement.



Diploma Programme Core

The IBDP curriculum places at the very centre of the DP model the three elements of the DP 'core', i.e. Theory of Knowledge (TOK), Extended Essay (EE) and Creativity, Activity, Service (CAS).

Theory of Knowledge(TOK)

The TOK is a compulsory course designed around a central question, 'How do we know?'. It encourages students to think about the nature of knowledge, to reflect on the process of learning in all the subjects they study as part of their IBDP, and to make connections across them. Students gain a better understanding of how we create, classify and assess the value of knowledge as well as a better understanding of the aims and methodologies of the areas of knowledge. TOK is assessed through a presentation and an essay, which is a response to one of six prescribed titles which change every examination session.

The Extended Essay(EE)

The Extended Essay is a compulsory piece of independent research into a topic chosen by the student that is externally assessed. Students choose to do their EE in one of the subjects offered in the Diploma, usually one of students' Higher Level subjects. The Extended Essay is intended to promote high-level research and writing skills, intellectual discovery and creativity while engaging students in personal research. This leads to a major piece of formal academic writing, of up to 4,000 words, in which ideas and findings are communicated in a reasoned, coherent and appropriate manner.

Creativity, Activity, Service (CAS)

CAS enables students to enhance their personal and interpersonal development by learning through experience. It provides opportunities for self-determination and collaboration with others, fostering a sense of accomplishment and social responsibility. It involves **creativity** (arts, and other experiences that involve creative thinking), **activity** (contributing to a healthy lifestyle) and **service** (an unpaid and voluntary exchange that has a learning benefit for the student).

Studied throughout the Diploma Programme, CAS requires students to take part in a range of activities and experiences and at least one project, alongside their academic studies. It is not formally assessed. Students reflect on their CAS experiences as part of the DP and provide evidence of achieving the seven learning outcomes for CAS (see page 21).

University/Career Counselling

IB Diploma holders gain admission to universities throughout the world. Formal agreements exist between the IB and ministries of education and private institutions. Some colleges and universities may offer advantages such as advanced standing or course credit to students with strong IB examination results. Therefore, it is essential that students know the specific requirements of the preferred university with regard to the IB Diploma. Subjects and level of study may need to be chosen with university requirements in mind.

Through the University and Careers Counselling Department at Colegiul Național *Andrei Șaguna*, students are offered advice on personal development, career choice and university research and applications. Career and university guidance starts prior to the Diploma Programme, in grade 10.

Pre-DP year (grade 10)

During the 10th grade students have regular meetings (once every other month) with the University and Careers Counsellor and the DP coordinator. Students are inducted into how to research for educational opportunities at universities, locally or abroad, and into understanding the relevance of pursuing the Diploma in order to access these opportunities.

DP year one

In the first year of the programme, students have regular meetings (twice a month) with the University and Careers Counsellor and the DP coordinator. An additional priority this year will be researching for scholarship opportunities. They become familiar with different university application systems from around the world and with writing the personal statements or the specific college essays. They begin working on their CVs.

DP year two

During the second year of the DP, there will be a shift from group meetings to individual interviews with the Counselor and the DP coordinator, in which parents can also participate. They finalize their university intentions and learn the skills necessary during an interview for university admission. Students update their CVs, request references from teachers and finish their written components of the application (personal statements, essays).

Subject Overview

The following section includes a course-by-course outline of the subjects offered in the Diploma Programme at CNAS. Each presentation includes a course overview, the reason why you should choose that particular course and how the course will be assessed.

| GROUP 1 | GROUP 2 | GROUP 3 | GROUP 4 | GROUP 5 | GROUP 6 |
|--|-----------------------|--|--|---|------------------|
| STUDIES IN LANGUAGE AND LITERATURE | LANGUAGE ACQUISITION | INDIVIDUALS AND SOCIETIES | SCIENCES | MATHEMATICS | THE ARTS |
| ENGLISH A: LANGUAGE AND LITERATURE – SL/HL | GERMAN AB INITIO – SL | ENVIRONMENTAL SYSTEMS AND SOCIETIES – SL | ENVIRONMENTAL SYSTEMS AND SOCIETIES – SL | MATHEMATICS: ANALYSIS AND APPROACHES – SL/HL | VISUAL ARTS – SL |
| | GERMAN B – SL/HL | GLOBAL POLITICS –SL | PHYSICS – SL/HL | MATHEMATICS: APPLICATIONS AND INTERPRETATION –SL/HL | |
| | | | COMPUTER SCIENCE – SL/HL | | |



ENGLISH A: LANGUAGE AND LITERATURE

Group 1: Studies in Language and Literature

Standard Level and Higher Level

COURSE OVERVIEW

English Language and Literature invites the students to explore the complexity of language and literature through the study of a wide range of texts, both literary and non-literary, from different periods, styles and cultures.

The texts comprise a variety of themes that cross continents and centuries, and reflect the seven key concepts of language and literature: identity, culture, creativity, communication, perspective, transformation and representation.

English Language and Literature may be studied at both Standard Level (SL) and Higher Level (HL), the latter requiring additional reading and a more in-depth and thorough approach. The students are also expected to explore concepts such as readers, writers and texts, time and space, and intertextuality. The receptive, productive and interactive skills will be developed during the course, as well as skills in performing.

HOW IS THIS COURSE ASSESSED?

Standard Level (SL)

External assessment:

Paper 1: 35%

Paper 2: 35%

Internal assessment:

Individual oral: 30%

Higher Level (HL)

External assessment:

Paper 1: 35%

Paper 2: 25%

Essay: 20%

Internal assessment:

Individual oral: 20%

Why study this course?

The English Language and Literature course will offer the students the opportunity to become more open-minded to and tolerant of other cultures, and to express more carefully-balanced opinions. It is expected that they will develop critical thinking skills and will become better communicators. Moreover, their curiosity will be nurtured and they will foster a lifelong interest in and passion for literature.

GERMAN B: AB INITIO

Group 2: Language Acquisition

Standard Level

COURSE OVERVIEW

The German Ab Initio course is designed to offer students the opportunity to develop the necessary German language skills, to understand and communicate using the language in different familiar environments and situations.

The course focuses on the five prescribed themes (identities, experiences, human ingenuity, social organization and sharing the planet), on the one hand, and on developing key language skills, such as: listening, speaking, writing, reading, on the other. Students are expected to develop the range and complexity of language, to speak and understand in order to communicate. They continue to enlarge their knowledge of vocabulary and grammar. The themes provide relevant context for studying and opportunities for students to communicate about matters of personal, local or national and global interest. Each theme is divided into units which last approximately 8- 10 weeks.

Since globalization has been on the rise, and the recent past events have urged people from diverse backgrounds and cultures to come together, the philosophy on which the course is based is meant to foster and mature all skills necessary to contribute to and enhance one's international mindedness. The conceptual understanding (audience, context, purpose, meaning, variation) is to be kept in mind when connecting the themes and topics to receptive, productive and interactive skills development.

HOW IS THIS COURSE ASSESSED?

Standard Level (SL)

Productive skills:

Writing 25%

Receptive skill:

Listening: 25%

Reading: 25%

Internal Assessment:

Oral assessment: 25%

Why study this course?

The Ab Initio course is designed so that students are encouraged to approach the learning of the German language in close connection with the cultural aspect specific to the geographical areas where German is the official language. The course supports the students in developing international mindedness, increased understanding and tolerance towards their peers coming from different social backgrounds or cultures, and viewing language and culture in a global context.



GERMAN B

Group 2: Language Acquisition

Standard Level and Higher Level

COURSE OVERVIEW

The language acquisition course is designed for students that already have basic knowledge of the German language and want to improve and gain more insight into the complexity of the language in order to effectively communicate in diverse academic and professional contexts. Students continue to develop their knowledge and grammar, as well as the conceptual understanding of the structure of language in order to construct, analyze and evaluate arguments on a variety of topics related to the course content and German language culture. Three skills are expected to be enhanced during the course, namely receptive (written and spoken authentic texts), productive (ideas and opinions on a variety of subjects) and interactive (oral exchanges).

The syllabuses of Language B, be it SL or HL, focus on five prescribed themes: Identities, Experiences, Human Ingenuity, Social Organization and Sharing the Planet. The course is meant to provide students with the opportunity to communicate about personal, national and global topics, starting from the above mentioned ones.

HOW IS THIS COURSE ASSESSED?

Standard Level (SL)

Productive skills:

Writing 25%

Receptive skill:

Listening: 25%

Reading: 25%

Internal Assessment:

Oral assessment: 25%

Higher Level (HL)

Though HL and SL assessment outlines are identical, the nature of the assessments is different. The writing at HL, the set tasks will require more complex structures and vocabulary and higher-order thinking skills. The study of two literary works originally written in the target language is required only at HL.

Why study this course?

Language B - language acquisition courses are designed especially for students who wish to study languages at university level, or for whom the use of the language in their future professional and personal life may be required. The goal of the courses is to prepare students for situations that might directly influence their academic and professional future and to extend their German language knowledge to a higher level.

GLOBAL POLITICS

Group 3: Individual and Societies

Standard Level

COURSE OVERVIEW

The Diploma Programme Global Politics course offers students the opportunity to explore four compulsory political concepts (Power, Sovereignty and international relations, Human rights, Development, and Peace and conflict) in a range of contexts, with a special focus on 21st century events. It allows students to develop an understanding of the local, national, international and global dimensions of political activity and processes, as well as to explore political issues affecting their own lives. A central feature of the course is that political concepts and issues are examined from multiple perspectives.

HOW IS THIS COURSE ASSESSED?

Standard Level (SL)

External:

Paper One: 30%

Paper Two: 45%

Internal:

Engagement Activity: 25%

The core units of the course offer students a broad introduction to the key actors and interactions in contemporary global politics before delving into the political aspects of human rights, development, and peace and conflict. Together, the core units of the course make up the central unifying theme of 'people, power and politics'. The emphasis on 'people' reflects the fact that the course explores politics not only at a state level but it also explores the function and impact of non-state actors, communities, groups and individuals. The concept of 'power' is emphasized as being particularly crucial to understanding the dynamics, tensions and outcomes of global politics. Throughout the course, issues such as conflict, migration or climate change are explored through an explicitly political lens; 'politics' provide a uniquely rich context in which to explore the relationship between people and power.

Why study this course?

This course helps students to understand abstract political concepts by grounding them in real-world examples and case studies. It also invites comparison between such examples and case studies to ensure a wider and transnational perspective. Participants in this course will develop an understanding of key political issues on the international stage, both current and historical, and will gain basic knowledge regarding states, transnational actors, security issues, international law and global challenges.

Students will approach abstract political concepts by grounding them in real-world examples and case studies and by drawing comparisons meant to ensure a wider and transnational perspective. The examples and case studies will be chosen based both on their global and local relevance. By the end of the course, participants will be able to critically discuss issues related to global politics using their already acquired knowledge of governments and non-governmental actors and various resources.



ENVIRONMENTAL SYSTEMS AND SOCIETIES (ESS)

Group 3: Individual and societies/Group 4: Sciences

Standard Level

COURSE OVERVIEW

Environmental Systems and Societies is an interdisciplinary course that can be taken as either Group 3 (Individual and Societies) or Group 4 (Sciences) subject.

Within the ESS curriculum, the concept of 'systems' is essential. A system contains components, connected through various processes and interactions that work together to form a whole entity. This 'holistic' approach allows an appreciation of how environmental and other systems function and that they do not work in isolation, but rather through interactions with other systems. The systems approach emphasizes that concepts, techniques and terms can be transferred from one discipline (such as ecology) to another (such as policy) and provides a framework for examining and explaining complex environmental problems.

Your math, physics, chemistry, biology, geography, social science teachers provided you with the basic material during your first two years of high school. This course will supplement your previous classroom experiences, building on them through active learning.

HOW IS THIS COURSE ASSESSED?

Standard Level (SL)

External:

Paper 1: 25%

Paper 2: 50%

Internal assessment:

Individual investigation: 25%

Why study this course?

The ESS course will be an opportunity to acquire, apply and transfer knowledge, to evaluate and develop a variety of skills by engaging with the investigation of environmental and societal issues at both a local and global level. Thus, the students will be able to evaluate the political, economic and social contexts of issues, to select and apply the appropriate research tools and use the correspondent practical skills necessary to carry out investigations and to suggest collaborative and innovative solutions that demonstrate awareness and respect for the cultural differences and value systems of others.

PHYSICS

Group 4: Sciences

Standard Level and Higher Level

COURSE OVERVIEW

Physics may be studied at Standard Level (SL) or Higher Level (HL). Both share a common core, which is extended at HL.

The students will be provided with examples and exam tips that demonstrate best practices and warn against common errors. A separate part of the Physics course is allocated to data-based and practical questions, which are the most distinctive feature of the syllabus. Numerous examples will be used to tackle unfamiliar situations, interpret and analyse experimental data, and suggest improvements to experimental procedures.

Practical problems and a complete set of IB-style examination papers will provide further opportunities for students to check their knowledge and skills, boost their confidence and monitor the progress of their studies. Practical problems are given at the end of each topic. These are IB-style questions that provide students with an opportunity to test themselves and improve their problem-solving skills. Some questions introduce factual or theoretical material from the syllabus that can be studied independently.

HOW IS THIS COURSE ASSESSED?

Standard Level (SL)

External:

Paper One: 20%

Paper Two: 40%

Paper Three: 20%

Internal:

Individual Investigation: 20%

Higher Level (HL)

External:

Paper One: 20%

Paper Two: 36%

Paper Three: 24%

Internal assessment:

Individual Investigation: 20%

Why study this course?

The Physics course provides full coverage of the IB diploma syllabus in Physics and offers support to students preparing for their examinations. The course will help you to learn the essential topics and concepts, will strengthen your problem-solving skills and improve your approach of IB examinations.



COMPUTER SCIENCE

Group 4: Sciences

Standard Level and Higher Level

COURSE OVERVIEW

The IB DP Computer Science (both SL and HL) course is designed to prepare students aged 16 to 19 for success at university and beyond. It requires an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. The course, underpinned by conceptual thinking, draws on a wide spectrum of knowledge, and enables and empowers innovation, exploration and the acquisition of further knowledge. Students will study how computer science interacts with and influences cultures, society and how individuals and societies behave, and the ethical issues involved.

During the course the student will develop computational solutions. This will involve the ability to: identify a problem or unanswered question; design, prototype and test a proposed solution; liaise with clients to evaluate the success of the proposed solution and make recommendations for future developments

HOW IS THIS COURSE ASSESSED?

Standard Level (SL)

External:

Paper One: 45%

Paper Two: 25%

Internal:

Computational Solution: 30%

Higher Level (HL)

External:

Paper One: 40%

Paper Two: 20%

Paper Three: 20%

Internal assessment:

Computational Solution: 20%

Why study this course?

The Computer Science course will, among others, provide the students with a body of knowledge, methods and techniques that characterize computer science and will enable students to apply and use them. It will engender an awareness of the need for, and the value of, effective collaboration and communication in resolving complex problems and will provide opportunities for study and creativity within a global context that will stimulate and challenge students to develop the skills necessary for independent and lifelong learning.

MATHEMATICS: APPLICATIONS & INTERPRETATION

Group 5: Mathematics

Standard Level and Higher Level

COURSE OVERVIEW

The IB DP Mathematics: applications and interpretation course can be studied at both standard and higher level. The course recognizes the increasingly essential role that mathematics and technology play in a diverse range of fields in a data-rich world. As such, it emphasizes the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling.

Maths AI is concerned with the application of mathematics in solving concrete problems and not in deepening the theoretical foundations or proving all the basic or nuanced theorems. Students are encouraged to solve real-world problems, construct and communicate this mathematically and interpret the conclusions or generalizations.

Maths AI is more technology-focused than Maths AA and expects students to become experts in how to use the graphic display calculator or GDC. Graphics and finance applications, as well as instant equation solvers, will all be heavily incorporated into teaching, along with methods and tips for getting the most out of them.

HOW IS THIS COURSE ASSESSED?

Standard Level (SL)

External:

Paper One: 40%

Paper Two: 40%

Internal:

Exploration: 30%

Higher Level (HL)

External:

Paper One: 30%

Paper Two: 30%

Paper Three: 20%

Internal assessment:

Exploration: 20%

Why study this course?

Maths AI is probably best suited for students interested in a career in the humanities, statistics, or business, or in certain scientific fields like chemistry and biology, where more abstract mathematical knowledge is not really necessary. A Maths AI student may also want to consider career paths in design, psychology, or certain fields of economics



MATHEMATICS: ANALYSIS & APPROACHES

Group 5: Mathematics

Standard Level and Higher Level

COURSE OVERVIEW

The curriculum of the Mathematics: Analysis and Approaches Course focuses on the introduction of important mathematical concepts through the development of mathematical techniques. The majority of concepts are included because they underpin important mathematical processes and they are essential to any further study in mathematics. Students taking this course are expected to possess knowledge of basic concepts and to be equipped with the skills needed to apply mathematical techniques correctly, especially algebraic manipulation skills.

Students who choose the HL option in mathematics will delve deeper into complex mathematical problems and topics such as matrices, vectors, statistics and calculus. At HL the focus is on developing important mathematical concepts in a comprehensible, coherent and rigorous way. Students are encouraged to apply their mathematical knowledge to solve problems set in a variety of meaning contexts and unfamiliar situations. Development of each topic should feature justification and proof of results. Students embarking on this course should expect to develop insight into mathematical form and structure, and should be intellectually equipped to appreciate the links between concepts in different topic areas. The HL course is a demanding one, requiring students to study a broad range of mathematical topics through a number of different approaches and to varying degrees of depth.

HOW IS THIS COURSE ASSESSED?

Standard Level (SL)

External:

Paper One: 40%

Paper Two: 40%

Internal:

Exploration: 30%

Higher Level (HL)

External:

Paper One: 30%

Paper Two: 30%

Paper Three: 20%

Internal assessment:

Exploration: 20%

Why study this course?

The Mathematics: Analysis and Approaches Course contains a broad range of mathematical concepts and caters to students who anticipate a need for a sound mathematical background in preparation for future studies in subjects that have significant mathematical content, such as chemistry, economics, geography, psychology and business administration.

VISUAL ARTS

Group 6: Arts

Standard Level

COURSE OVERVIEW

The IB Diploma Programme Visual Arts course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media.

The Visual Arts course is student-centred and places student exploration at the heart of a holistic learning experience, including three core areas: Visual arts in context, Visual arts methods and Communicating visual arts. Those areas are interlinked and investigated by three forms of practice: theoretical practice, art-making practice and curatorial practice. The first year is a period of learning from masters, of self-discovery, reflection and development of skills in various media; the second year is a time for expanding and refining skills, as well as re-working by reflection on the conceptual relevance and artistic achievements of their own pieces of art.

The students' best art pieces will be reunited in an Exhibition (one of the three forms of assessment), the culmination of their two-year study and work. The exhibition will be the result of a selection the students will make based on a process of reflection and evaluation, articulating the reasoning behind their choices and identifying the ways in which selected works are connected.

HOW IS THIS COURSE ASSESSED?

Standard Level (SL)

External assessment:

Comparative Study: 25%

Process Portfolio: 40%

Internal assessment:

Exhibition: 40%

Why study this course?

The course is designed for students who want to go on to study Visual Arts in higher education, as well as for those who are seeking lifelong enrichment through visual arts.

DP Core The Extended Essay

OVERVIEW

The Extended Essay is one of the three elements of the DP 'core'. It is a compulsory piece of independent research into a topic chosen by the student that leads to a major piece of formal academic writing, of up to 4,000 words, in which ideas and findings are communicated in a reasoned, coherent and appropriate manner. Students choose to do their EE in one of the subjects offered in the Diploma, usually one of students' Higher Level subjects. The Extended Essay is intended to promote high-level research and writing skills, intellectual discovery and creativity while engaging students in personal research.

HOW IS THE EXTENDED ESSAY ASSESSED?

The Extended Essay will be written under the supervision of a teacher (usually of the subject that interests the research question) and with the close help of the librarian. The supervisor will meet with the student on a regular basis (based on the EE timeline), giving both verbal and written feedback. There will be 3 mandatory reflection sessions with the teacher, with the final session being the concluding interview. Nevertheless, the Extended Essay is externally assessed by the IB.



WHERE WILL THE EXTENDED ESSAY TAKE ME?

One major benefit of the Extended Essay in the DP is that it prepares the students for university research, thus helping them to perform better academically than students in other systems. It also:

- gives students full control over their work, in terms of choice of topic, subject area, research question and strategies
- teaches students how to write a research paper, with all its stages: coming up with a research question, collecting the data, analyzing and interpreting data, presenting the results, drawing the conclusions and mentioning the impact
- increases students' confidence in their ability to research and work independently
- offers students an advantage in the admission process, the score in EE (see 'Earning the Diploma' section in this brochure) being highly regarded in top universities around the world.

DP Core Creativity – Activity – Service (CAS)

OVERVIEW

CAS is designed to strengthen and extend students' personal and interpersonal learning. CAS engagement complements a challenging academic programme in a holistic way, providing students with opportunities for self-determination, collaboration, accomplishment, and enjoyment. Students reflect on their CAS experiences as part of the DP, and provide evidence of achieving the seven learning outcomes for CAS:

- identify strengths and develop areas for personal growth
- demonstrate that challenges have been undertaken, developing new skills in the process
- demonstrate how to initiate and plan a CAS experience
- show commitment to and perseverance in CAS experiences
- demonstrate the skills and recognize the benefits of working collaboratively
- demonstrate engagement with issues of global significance
- recognize and consider the ethics of choices and actions.

HOW IS CAS STRUCTURED?

CAS is organised around the three strands of Creativity, Activity, and Service, defined as follows:

- **Creativity:** exploring and extending ideas leading to an original or interpretive product or performance (creative work, arts).
- **Activity:** physical exertion contributing to a healthy lifestyle (physical activity, sports).
- **Service:** collaborative and reciprocal engagement with the community in response to an authentic need (helping others, volunteering).

WHAT IS THE IMPACT OF CAS?

Engaging in CAS enables students to demonstrate skills and abilities in real and practical ways, to grow as unique individuals and to recognise their role in relation to others. Students develop skills, attitudes, and competencies through a variety of individual and group experiences. These experiences provide students with opportunities to explore their interests and express their passions, personalities and perspectives. CAS is unique through its transformative nature and the feeling of fulfillment that students have for contributing to the world creatively, actively and empathically.



DP Core Theory of Knowledge (TOK)

COURSE OVERVIEW

The TOK curriculum is made up of three parts which are interconnected. The core theme – Knowledge and the Knower - helps students to reflect on themselves as knowers and thinkers, providing strong links to the IB Learner Profile. From the optional themes we select Knowledge and Language and Knowledge and politics which have a profound influence on people's lives. The TOK course is completed with the five Areas of Knowledge (AOK): History, the Human Sciences, The Natural Sciences, Mathematics, The Art.

In the first year we will do the core theme - Knowledge and the Knower, the optional themes - Knowledge and Language and Knowledge and Politics and two AOKs – History and The Human Sciences. In the second year we will do three AOKs - The Natural Sciences, Mathematics and The Art.



HOW IS THIS COURSE ASSESSED?

The internal assessment is a TOK exhibition through which students are required to explore how TOK manifests in the world around us. It is internally assessed by the teacher and externally moderated by the IB at the end of the course. The TOK course is externally assessed through the TOK essay. Students are required to write an essay in response to one of the six prescribed research questions issued by the IB for each examination session. The TOK exhibition will be prepared in the first year (April – May) and the TOK essay will be written in the second year (by the end of December).

WHERE WILL TOK TAKE ME?

Theory of Knowledge (TOK) is an essential course which makes students think about their own values, have their own perspective, be inquirers, explore knowledge across the range of disciplines, collaborate and act with integrity, be open-minded, caring, risk-takers, balanced and reflective. At the end of the TOK course students will be able to navigate and make sense of the world, to be more aware of their own perspectives, to reflect critically on their own beliefs and to make connections between academic disciplines.

Earning The Diploma

The IB Diploma Programme is marked out of 45 points. In order to be awarded the diploma, a student must achieve a minimum of 24 points out of the total 45. Each of the 6 subjects that you have chosen from the available ones in our curriculum is marked from 1 to 7, with specific descriptors for each subject group and the interdisciplinary subject (ESS), with a possible maximum number of points of 42.

Up to 3 bonus points are awarded for the core Theory of Knowledge and Extended Essay. These are marked from A to E (each mark having specific grade descriptors). Note that CAS is not marked, but completion is mandatory to earn the diploma. The total maximum number of 3 points possible to be scored in TOK and EE are awarded based on this matrix:

| TOK/EE | A | B | C | D | E/N |
|--------|-------------------|---|---|---|-------------------|
| A | 3 | 3 | 2 | 2 | Failing Condition |
| B | 3 | 2 | 2 | 1 | |
| C | 2 | 2 | 1 | 0 | |
| D | 2 | 1 | 0 | 0 | |
| E/N | Failing Condition | | | | |

*N= not submitted

*An E in either of the core components (TOK or EE) results in the diploma not being awarded.





Address: Șirul Andrei Șaguna, No. 1, Brașov, Romania

Phone: (+40)268.419.400

e-mail: secretariat@saguna.ro

www.saguna.ro